

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q97406

Jae Won YOU, et al.

Appln. No.: 10/599,680

Group Art Unit: 1614

Confirmation No.: 2749

Examiner: Nelson Clarence Blakely III

Filed: June 19, 2007

For: PENTAERYTHRITOL DERIVATIVES AND A METHOD FOR PREPARATION  
THEREOF, AND LIQUID CRYSTAL BASE CONTAINING THE SAME

**SUBMISSION OF EXECUTED DECLARATION UNDER 37 C.F.R. §1.132**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a copy of an executed Declaration Under 37 C.F.R. §1.132 signed

by Mr. Jae Won You.

Respectfully submitted,

/Sunhee Lee/

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Date: May 15, 2009

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**DECLARATION UNDER 37 C.F.R. § 1.132**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. I, Jae Won You, hereby declare and state:

THAT I am a citizen of Republic of Korea;

THAT I have received the degree of Master in industrial and engineering chemistry  
from Seoul National University; and

THAT I have been employed by Amorepacific Corporation since February 1, 1999,  
where I hold a position as Principal Scientist, with responsibility for Fine & Biochemical  
Research.

2. I reviewed the office action dated February 17, 2009 issued in the instant patent  
application and performed the following tests in order to show unexpectedly superior effects of

the compound defined in claim 1 of the application. All the tests were performed by me or under my supervision.

### 3. Experiments and Results

To verify the unexpected results of the claimed compound compared with those disclosed in the cited references and other pentaerythritol compounds, the moisture retaining ability of the tested compounds were measured as follows. Specifically, samples were prepared such that the moisture content of the compounds was 60%, and while the samples were kept in a constant temperature and humidity chamber (18 °C, RH20%), the weight change of the samples was observed over time, thereby enabling evaluation of the changes in moisture content.

The results are in the following table:

Pentaerythritol compounds	Percentage of moisture in sample (%)				
	Initial (hour 0)	1 hour	2 hours	4 hours	6 hours
Crothix of Linares	60	46	35	28	24
Pentaerythritol of Mitsuno	5 *	3	3	2	2
Pentaerythrityl isosterate	2 *	1	1	1	1
Example 34 of the present application	60	58	56	49	45

In an attempt to have pentaerythritol of Mitsuno and pentaerythrityl isosterate absorb moisture to 60% (so that the initial conditions of all samples are the same), they were left in humid condition for a long time. However, these compounds couldn't absorb moisture at all, and

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thus the experiment was performed using the sample with the moisture contents of the values indicated in table.

As can be seen in the above Table, pentaerythritol compounds of the present invention (Example 34) showed high moisture retaining ability compared with the compounds in Linares and Mitsuno, and other pentaerythritol derivative.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: May 14, 2009

  
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